

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMCAST CABLE COMMUNICATIONS, LLC,
Petitioner,

v.

PROMPTU SYSTEMS CORP.,
Patent Owner.

Case No. IPR2018-00344
U.S. Pat. No. 7,047,196

DECLARATION OF JOHN TINSMAN

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I. INTRODUCTION

1. I, John Tinsman, have been retained by Finnegan, Henderson, Farabow, Garrett & Dunner LLP (“Finnegan”) on behalf of Promptu Systems Corp. (“Promptu” or “Patent Owner”) as an expert in the fields of cable television network infrastructure, cable television control technologies, and voice recognition technologies. My qualifications in this area, as well as other areas, are established by my curriculum vitae, attached as Appendix A. I am being compensated for my time in this matter, and this compensation is not contingent upon my performance during this proceeding, the outcome of this proceeding, or any issues involved in or related to this proceeding. I have no financial interest in Petitioner Comcast Cable Communications, LLC, or Promptu.

II. QUALIFICATIONS

A. Education

2. I received a Bachelor’s degree and Master’s degree in Physics from the University of California, Santa Barbara in 1981 and 1983, respectively. My specialization for the Masters was medical and scientific instrumentation. I also received a Master’s in Business Administration from San Jose State University in 1995. I am a member of the IEEE, and a registered patent agent, Reg. No. 73,427.

B. Professional Experience

3. I am currently the CEO of GadgetJazz, an engineering design and innovation practice founded in 2017. I perform consulting services related to technology and business development, specifically in the areas of multimedia and communications technologies, distributed systems, high performance computing, and consulting on innovation and the development of intellectual property. Prior to founding GadgetJazz, I served as the Chief Technologist for the Kudelski Group's Intellectual Property and Innovation group.

4. Although originally trained as a physicist, I have more than 35 years of experience designing, developing, and deploying hardware and software for scientific, consumer, industrial and professional environments. I also have extensive experience in engineering management and business development, including the management of multinational teams. I have worked for a range of organizations, from academic institutions such as the Stanford Linear Accelerator Center (SLAC) at Stanford University and the Signal Processing Laboratory at the École Polytechnique Fédérale de Lausanne (EPFL), to pioneers in multimedia and digital television, such as Radius, Inc., OpenTV Inc., Qualcomm, and the Kudelski Group. In that time, I have published a number of papers and made numerous presentations at academic and professional conferences, as well as before the European Commission.

5. I specialize in the areas of analog and digital signal processing and communications, and the command and control functions that generally accompany them. From 1985 to 1989, I developed analog and digital signal processing hardware and software for data acquisition systems in high energy physics experiments at SLAC. I also worked on the command and control systems used to operate, calibrate and monitor such experiments, as well as the particle accelerator itself.

6. From 1989 to 1995, I applied these skills to computer graphics and multimedia systems at Radius. Radius was a leader in high end graphics, and an early developer of Macintosh based audio and video multimedia systems. These systems included multimedia ingest, editing, processing, compression and delivery, including server-based delivery over networks. Key markets for these products included pre-press, television post production, and video serving using video compression.

7. I worked at Radius as an engineer, and an engineering manager. Several of my projects were related to video editing and compression using various codecs such as MPEG-2 and Cinepak. This work included signal processing and signal enhancement, as well as the more general aspects of post-production using Apple Computer's QuickTime framework. These aspects included the use of time codes, edit lists, and other metadata to properly combine a collection of input

tracks into the final multimedia output. My other technical activities included the development of high speed networks, custom integrated circuits, and remote rendering and control of high-resolution graphics displays.

8. I joined Visual Edge in 1995 as its Vice President of Engineering. I lead a team of engineers in developing and supporting high performance image processing software for rendering and printing text and images on large format high resolution digital printers. This work involved product definition and engineering, as well as research on algorithms for imaging and color calibration.

9. In 1998, I moved to Switzerland to become a Principal Researcher at the EPFL, supervising a team of researchers and graduate students studying high performance signal processing. Specifically, this work involved using the then-new multimedia instruction sets appearing in microprocessors to accelerate audio, image and video processing and compression on high-end desktop computers.

10. My interests and background in signal and media processing also provided the opportunity to use my skills in related contexts. In 2000 and 2001, I consulted for a search engine company, Albert Inc., to develop a prototype voice navigation and control module for their textual search engine. The target environment for the prototype was high-end automobiles, with the goal of enabling voice-based searches for information and services related to the user's location. As a result, I worked extensively to understand a number of fundamental challenges to

gathering, processing and recognizing speech in an automotive environment. This work built upon audio experience dating back to 1979-1980 while attending UC Santa Barbara. While there, I developed my initial experience in the areas of digital signal processing, audio synthesis, and multitrack recording and mixing. One example of this experience was developing a computer-controlled drum synthesizer for Mattel.

11. From 2001 to 2007, I worked at OpenTV Inc. as a director in the Office of the CTO. OpenTV was a provider of set-top box middleware for cable and satellite providers, and was deeply involved in technology development and standards making for digital and interactive pay television. In that position, I worked both as a product architect in Europe and as OpenTV's representative at standards groups such as the DVB. My architectural job activities included working with other technology providers, including companies that provided conditional access and VOD technologies for integration with OpenTV's set-top box middleware. My standards work included contributions at the DVB to various technical and market development working groups, as well as at the steering board level. This work included significant involvement in the DVB's standardization efforts around their Multimedia Home Platform (MHP) standard for a TV-based interactive television.

12. I am a named inventor on eleven U.S. patents: Patent No. 10,044,873, entitled “Mute Alert”; Patent No. 10,038,859, entitled “Same screen, multiple content viewing method and apparatus”; Patent No. 10,032,192, entitled “Automatic localization of advertisements”; Patent No. 9,877,054, entitled “Dynamic Scheduling for Advanced Advertising in Linear Television”; Patent No. 9,799,048, entitled “Intelligent Tool to Support Manual Scheduling of Ads”; Patent No. 9,711,128, entitled “Combined audio for multiple content presentation”; Patent Nos. 9,344,470, 8,782,305, 8,335,873, and 7,930,449, all entitled “Method and systems for data transmission”; and Patent No. D759,684, entitled “Display screen with a graphical user interface.” I am also the named inventor on two European patents: No. 2,700,200, entitled “Methods and systems for data transmission”; and No. 1,912,441, entitled “Buffering and transmitting video data upon request.”

13. Based on my educational background and professional experience, I consider myself an expert in signal processing, data acquisition systems, speech recognition, mobile communications, multimedia systems, digital video editing systems, video and image compression, embedded systems and middleware, content protection technologies, digital printing, interactive television and advertising technologies, steaming media, digital television systems and client server architectures. I also have significant experience in standards and

standardization related to the Digital Video Broadcasting (DVB) project, the European Telecommunications Standards Institute (ETSI), and Cable Labs.

C. Experience with Promptu's Industry

14. I note that, with respect to the state of the industry at the time of the invention, Comcast's expert Mr. Wechselberger asserted that to implement a voice recognition system in the television industry, one would simply buy the technology as a "black box" (Ex. 2034 at 30:7-17), that "[y]ou don't really need to open it up or understand how it works[;] . . . [y]ou use it[and] put it to work" (*id.* at 36:13-25), and that implementing a voice recognition system for a television network would simply require buying an "off the shelf voice recognition system[]." *Id.* at 42:6-23. I disagree. At the relevant time period, things were not so simple, as it took several years of product development for a commercial voice recognition system to reach the market, and to my knowledge AgileTV (later known as Promptu) was the first company to develop a working system for cable TV systems using existing cable industry network architecture in the early 2000s.

15. In 2004, I visited AgileTV at the request of the CTO of OpenTV. He had seen their earlier work, and was interested in seeing the results of their product development efforts, as these could be of commercial interest to OpenTV in its efforts to sell its set top box middleware into the US cable industry. I met with Harry Printz, who explained both their system architecture, and a number of

aspects of their speech recognition system. He then demonstrated a functional system that included the voice remote, a set top box, a local head end and the Agile speech recognition platform. Adding speech recognition capabilities to existing set top box applications, such as a program guide, required careful thought and integration. AgileTV's system was technologically advanced and demonstrated thoughtful adaptation to the cable TV environment. It was not the result of simply putting an off-the-shelf speech recognition solution in the head-end. Put simply, there were no "black box" options available to use a back channel containing a multiplicity of identified speech channels for speech recognition at a wireline node in a network supporting video or cable television delivery, as recited in the '196 patent's claims.

III. SUMMARY OF OPINIONS

16. I have been asked to consider the '196 patent and what Comcast states is prior art to the '196 patent, and to offer my opinions on the effect of that art on the claims of the '196 patent. In particular, I have been asked to consider whether claims 1-2, 4-6, 12-13, 27-28, 30-32, and 38-42 would have been obvious to a POSITA based on the combinations of grounds based on Julia, Nazarathy, Quigley, Banker, and Gordon presented in the petition. I do not believe that Comcast has proven that the claims would have been obvious based on any of the presented challenges.

IV. MATERIALS CONSIDERED

17. In forming my opinions, I have considered the '196 patent, including the patent claims. Further, I have also considered the Petition, Mr. Schmandt's declaration, Mr. Schmandt's deposition transcript, the Board's Institution Decision, the exhibits to Comcast's Petition, and the materials cited or referred to in my declaration.

V. THE '196 PATENT

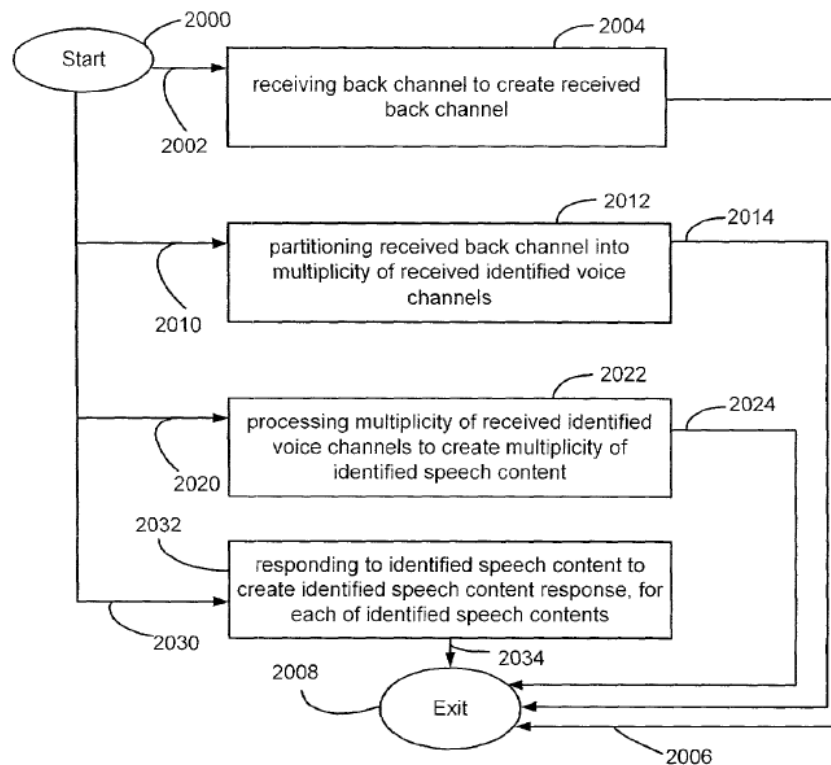
A. Effective Filing Date of the Patent

18. I understand that the '196 patent was filed on February 16, 2001, and includes a priority reference to U.S. Provisional Patent App. No. 60/210,440, filed June 8, 2000. Ex. 1001, Cover Page. I have been advised to use June 8, 2000, as the "effective" filing date for the purposes of my analysis of the '196 patent and to assume that the timeframe for the alleged invention of the '196 patent is on or around that time. However, I have not analyzed whether the claims of the '196 patent are supported by the provisional application filed in 2000, or whether any claim of the '196 patent is entitled to that priority date. In any event, my analysis herein would not be substantially affected by a priority date of February 2001 instead of June 2000.

B. Disclosure and Claims of the '196 Patent

19. The '196 patent discloses novel and nonobvious methods and systems for speech recognition in a network. Ex. 1001 at Abstract. Unlike existing speech recognition methods and systems, the '196 patent teaches a method that uses a back channel containing a multiplicity of identified speech channels for speech recognition at a wireline node in a network supporting video or cable television delivery. *Id.* at 22:8-12. In an exemplary embodiment, the back channel is from a multiplicity of user sites and is presented to a speech processing system at the wireline node in the network. *Id.* at 22:12-14. The network supports video and/or cable television delivery to the user sites. *Id.* at 22:8-15.

20. Figure 10 depicts a flowchart of one of the patent's disclosed methods:



Id. at Fig. 10, 7:42-47.

VI. DEFINITION OF A PERSON OF ORDINARY SKILL IN THE ART

21. I understand that I must consider the '196 patent, including its disclosure and claims, as well as the asserted prior art and general state of the art from the standpoint of a person of ordinary skill in the art at the time of the invention of the '196 patent.

22. In determining the appropriate level of ordinary skill in the art in this case, I have been instructed that various factors may be considered, including the type of problems encountered in the art, prior art solutions to those problems, the rapidity with which innovations are made, the sophistication of the technology, and

the educational level of active workers in the field. I have considered these factors in my analysis.

23. I understand that Comcast and Mr. Schmandt have proposed that a person of ordinary skill in the art (“POSITA”) for the ’196 patent would be:

A person of ordinary skill in the art would have been familiar with interactive multi-media network architectures, including for interactive television, and speech recognition and voice control technologies. This familiarity would have come through having (i) an undergraduate degree (or equivalent) in electrical engineering, computer science, or a comparable subject and at least three years of professional work experience in the field of multi-media systems including in particular speech recognition and control technologies, or (ii) an advanced degree (or equivalent) in electrical engineering, computer science, or a comparable subject and at least one year of post-graduate research or work experience in the field of multi-media systems including in particular speech recognition and control technologies.

24. I also understand that the Board accepted Comcast’s proposed level of skill in the Institution Decision with minor modifications. Specifically, the Board removed the words “at least” from Comcast’s proposed definition. Paper 10 at 17-18.

25. I understand that a POSITA is a hypothetical individual having the qualities described above, and that a POSITA is deemed to have complete knowledge of the prior art. Based on my experience, which includes an advanced degree in Physics (which is “equivalent” or “comparable” to an advanced degree in electrical engineering or computer science for this technology), in addition to my above-noted experience with speech recognition and control technologies, I met Comcast’s proposed level of ordinary skill in the art in this proceeding at the time of the invention, and I now exceed that level of skill.

VII. LEGAL STANDARDS

26. In preparing this declaration, I have been educated generally on relevant patent law issues, including the standards for anticipation and obviousness. Specifically, I understand that for a patent claim to be anticipated (i.e., to not be novel), a single prior art document must disclose, either expressly or inherently, each and every claim limitation. I also understand that a claim is only obvious if the differences between the claim and the prior art are such that the subject matter as a whole would have been obvious at the time of the invention to a person having ordinary skill in the art (“POSITA”). I have been informed that it is crucial to avoid injecting impermissible hindsight into an obviousness inquiry.

27. I also understand that to show obviousness, Comcast must show an articulated reason for combining or modifying the prior art, such as through some

teaching, suggestion, or motivation to one of ordinary skill in the art to combine the elements in the way claimed in the patent. The reference or reference combinations must provide a reasonable expectation of success and not teach away from the claimed invention.

28. I have further been advised that several factual inquiries underlie a determination of obviousness. These inquiries include the scope and content of the prior art, the level of ordinary skill in the field of the invention, the differences between the claimed invention and the prior art, and any objective evidence of non-obviousness. I have been advised that objective evidence of non-obviousness directly attributable to the claimed invention, known as “secondary considerations of nonobviousness,” may include commercial success, satisfaction of a long-felt but unsolved need, failure of others, copying, skepticism or disbelief before the invention, and unexpected results.

29. I have been informed that in this proceeding, before the U.S. Patent and Trademark Office, claim terms are given their broadest reasonable interpretation in light of the specification. I have also been advised that, at the same time, claim terms are given their ordinary and customary meaning as would be understood by a POSITA. I understand that the construction of claim terms applied during this proceeding may differ from the construction used in a district court.

30. With this understanding, I do not believe that Comcast has explained why a POSITA would have found the challenged claims obvious based on the grounds including Julia, Nazarathy, Quigley, Banker, and Gordon presented in the petition. Accordingly, as discussed in more detail below, it is my opinion that Comcast has not shown that each and every feature of claims 1-2, 4-6, 12-13, 27-28, 30-32, and 38-42 of the '196 patent is either fully disclosed or would have been obvious to a POSITA based on the teachings of that art.

VIII. COMCAST HAS NOT SHOWN THAT EACH ELEMENT OF THE CHALLENGED CLAIMS IS RENDERED OBVIOUS BY THE PRIOR ART

A. The petition's errors for independent claims 1 and 27

1. Claim 1

31. In my opinion, a POSITA would not have considered the mapping provided in the petition to establish that claim 1 of the '196 patent is unpatentable as obvious under 35 U.S.C. § 103 based on “Julia Combined with the Teaching of Nazarathy or Quigley” (*see* Pet. 43-48) for two primary reasons. First, the petition completely ignores several claim elements, and I have been informed that the claim must be considered as a whole to establish obviousness. Second, the petition inconsistently interprets other claim elements—interpreting an element one way in one part of the claim, and another way for other parts of the same claim.

32. Claim 1 contains a preamble and four limitations that build off of it:

1. A method of using a back channel containing a multiplicity of identified speech channels from a multiplicity of user sites presented to a speech processing system at a wireline node in a network supporting at least one of cable television delivery and video delivery, comprising the steps of:

receiving said back channel to create a received back channel;

partitioning said received back channel into a multiplicity of received identified speech channels;

processing said multiplicity of said received identified speech channels to create a multiplicity of identified speech content; and

responding to said identified speech content to create an identified speech content response that is unique, for each of said multiplicity of identified speech contents.

Ex. 1001 at 50:62-51:10. Reviewing the petition's analysis for the *receiving*, *partitioning*, and *processing* limitations reveals how the petition changed the meaning of the claim elements in the limitations to map the cited art to the claim. Because the analysis ignores the meaning of the claim elements when considered as a whole, a POSITA would not find the claim is obvious.

a. *receiving said back channel to create a received back channel*

33. The receiving element of claim 1 requires two parts: “*receiving*” a first element (“*said back channel*”) “*to create*” a second element (“*a received back channel*”). The petition’s two paragraphs discussing the receiving element, however, never address how any of the references, Julia, Nazarathy, or Quigley, creates a received back channel.

34. In the first paragraph, the petition makes several assertions about what Julia discloses but never explains their pertinence. None discuss using a back channel to create something:

 In Julia, the viewer issue voice command using “voice input device 102,” which transmits the voice command to “communications box 104.” The communications box transmits the voice command signal over “network 106” to “remote server or servers 108.” Julia states that network 106 “is a two-way electronic communications network and may be embodied in electronic communication infrastructure including coaxial (cable television) lines” Julia also explains that “multiple users” each having their own input device can issue voice commands for processing by the central server.

Pet. 44 (citing Ex. 1012 at 3:39-54, 3:54-55, 4:31-35, 6:12-26).

35. The second paragraph of the petition asserted that Julia discloses a voice control system that can be implemented in an interactive cable television network. Pet. 43. But that is not what a POSITA would have understood Julia to disclose. Instead, Julia is directed to an online interface using spoken input, Ex. 1012 at Title, where the network, such as the Internet, can be implemented over cable lines. *Id.* at 4:31-39.

36. Schmandt's declaration does not support the petition's conclusion that "Thus, a person of ordinary skill in the art would recognize that remote server 108 receives the 'back channel to create a received back channel,' as recited in claim 1". Schmandt does not even discuss the Nazarathy and Quigley references. Ex. 1019 ¶¶ 311-312. Instead, Schmandt reaches his conclusion by applying an inconsistent application of the term "back channel." Schmandt abandons the petition's assertion that the words "back channel" mean an "upstream communication *channel* delivering signals from multiple user sites to a central wireline node," Pet. 7-8 (emphasis added), and instead maps "a received back channel" to "the *data* coming in from the multiple network users from via network 106," Ex. 1019 ¶ 311 (emphasis added). Neither Comcast nor Schmandt explains why "*back channel*" means one thing when the claim recites just "*back channel*" (i.e., a type of upstream channel) but something else when the claim recites "*received back channel*" (i.e., a type of data).

37. Accordingly, in my opinion, a POSITA would not have found the claim obvious based on the petition's arguments.

b. *partitioning said received back channel into a multiplicity of received identified speech channels*

38. When the petition discusses the “*partitioning*” limitation, it ignores the antecedent basis of “*said received back channel*.” Instead, it addresses the claim element as if it recited “*partitioning said back channel*” rather than “*partitioning said received back channel*,” which was created by receiving “*said back channel*.”

39. The petition addresses the claim element as if it recited “*partitioning said back channel*.” As explained above, Petitioner interpreted “back channel” as a type of upstream channel. Pet. 44 (“the ‘back channel’ (i.e., ‘upstream communication channel delivering signals from multiple user sites to a central wireline node’)”). For the partitioning limitation, the petition only maps the claimed “*partitioning*” to Nazarathy and Quigley and asserts that they disclose “*partitioning an upstream channel*.” Pet. 46-47. The petition does not contend that either Nazarathy or Quigley disclose partitioning data, as their mapping of “received back channel” would require.

40. To the extent Comcast contends that both “*said back channel*” and “*said received back channel*” are the same thing, i.e. the upstream communication

channel, several problems arise. **First**, a POSITA would have found relying on partitioning the upstream signal contradicts Schmandt's only mapping for "*said received back channel*" in the "*receiving*" element, which is that "*said received back channel*" is "the data coming in from the multiple network users from via network 106," as discussed above. **Second**, if "*said back channel*" and "*said received back channel*" are the same thing, "*to create a received back channel*" would be read out of the claims, which I have been informed violates the law on claim construction. **Third**, a POSITA would not understand these to be the same thing.

41. It also makes no sense to apply the cited teaching of Nazarathy and Quigley to Schmandt's "*said received back channel*." The petition relies on concepts of applying time division multiplexing or wavelength division multiplexing to a signal. Pet. 46. But Schmandt maps "*said received back channel*" to data, not a signal. Ex. 1019 ¶¶ 311, 312. The petition, however, offers no explanation of how or why signal processing techniques would be applied to data received by remote server 108 of Julia.

42. Finally, the petition's analysis again omits part of the claim language. This claim element requires "*a multiplicity of received identified speech channels*," which is never even mentioned in the petition's analysis. This is because there is no correlation between the signal level operations in Nazarathy and Quigley and

“dividing the received back channel into multiple portions that are each identified with speech commands originating from system users,” as Comcast construes those claims. Pet. 8-9. For example, in Nazarathy, the multiplexing Comcast points to multiplexes “e.g., four RF sections each collecting returns from 500 homes . . .” not “into multiple portions that are each identified with speech commands originating from system users.” Ex. 1013 at 12:26-33. Similarly, Comcast asserts that Quigley discloses assigning each cable modem a portion (i.e., time slot) of the upstream channel in which it can transmit data. Pet. 46. But Quigley does not teach that each time slot is “identified with speech commands originating from system users,” as required to meet Comcast’s construction.

43. Accordingly, a POSTIA would not have considered the arguments in the petition render the claim obvious.

c. *processing said multiplicity of said received identified speech channels to create a multiplicity of identified speech content*

44. For the “processing” step, the petition again makes an unsupported logical leap. The petition had previously taken the position that a channel is a signal (Pet. 46), but this section conflates a signal with data, inconsistently interpreting the claim limitations requiring processing signals under Petitioner’s own constructions. In the petition, the only discussion of the processing element is as follows:

Julia explains that “[a]t remote server 108, the voice data is *processed* by request processing logic 300 in order to understand the user’s request and construct an appropriate query or request for navigation of remote data source 110” Julia at 3:61-65. The “voice data received from the user is interpreted in order to understand the user’s request for information.” *Id.* at 7:5-7. Thus, Julia discloses “processing said multiplicity of said received identified speech channels” (i.e., voice command signals) “to create a multiplicity of identified speech content” (i.e., each user’s specific command), as recited in the claim. Schmandt Decl. ¶¶ 322-328.

Pet. 47. In that paragraph, the petition, attempting to stay consistent with its assertions that a channel is a signal, jumps from a discussion of processing voice data to asserting that Julia thus discloses voice command signals without explaining why processing data teaches or discloses processing signals. Petitioner cites only Schmandt for support. *Id.* But Schmandt does not support that assertion. Ex. 1019 ¶ 322. Rather than agreeing that speech channels are signals, as Petitioner argues, Schmandt instead maps the “identified speech channels” to “the voice input data from the various users.” *Id.* Accordingly, the petition’s assertion is not only conclusory but also unsupported.

2. Claim 27

45. The petition fails to establish that claim 27 is unpatentable for not only the same reasons as claim 1 but also because the petition attempts to read out many of the structural relationships recited in the claim.

a. The relationship between claim 1 and claim 27.

46. Given the overlap in claim language between claims 1 and 27, the petition fails to establish that claim 27 is unpatentable for at least the same reasons as claim 1. Independent claim 27 recites the following:

27. A system supporting speech recognition in a network,
said system comprising:

a speech recognition system coupled to a wireline node in
said network for receiving a back channel from a
multiplicity of user sites coupled to said network, further
comprising

a back channel receiver, for **receiving said back channel
to create a received back channel;**

a speech channel partitioner, for **partitioning said
received back channel into a multiplicity of received
identified speech channels;** and

a processor network executing a program system
comprised of program steps residing in memory

accessibly coupled to at least one computer in said processor network;

wherein said program system is comprised of the program steps of:

processing said multiplicity of said received identified speech channels to create a multiplicity of identified speech content;

responding to said identified speech content to create an identified speech content response, for each of said multiplicity of said identified speech contents; and

wherein said network supports at least one of the collection comprising: cable television delivery to said multiplicity of user sites; and video delivery to said multiplicity of user sites.

Ex. 1001 at 55:9-35. For each of the bolded elements, the petition relies upon a reference back to its discussion of claim 1. Pet. 54-55. Accordingly, the POSITA would not have considered the cited art to render the claims obvious. The petition, furthermore, ignores several other elements of the claim.

b. Julia does not disclose *a speech recognition system coupled to a wireline node*

47. The petition ignores that the first element of claim 27 requires “*a speech recognition system coupled to a wireline node.*” Instead, the petition only

asserts that “[i]n Julia, speech recognition processing is performed by remote server 108, which constitutes ‘a wireline node’ in the network.” Pet. 53.

Schmandt’s testimony on this topic is not consistent with a POSITA’s understanding because he does not know what “coupled to” means and based his opinion on it meaning “anything.” Ex. 2034 at 26:22-29:9. While the petition makes no attempt to explain its position, to the extent Comcast is trying to map both the speech recognition system and wireline node to remote server 108¹, that is an improper interpretation of the claim language because I have been advised that a proper interpretation “must give meaning to all the words in [the] claims.”

3. The petition’s stated motivations to combine Julia with Nazarathy or Quigley, are facially deficient.

48. Petitioner’s combinations of references are facially deficient because the petition fails to articulate a motivation to combine the features of the prior art to yield the claimed invention. The entirety of the petition’s discussion of a motivation to combine Julia with Nazarathy or Quigley falls within mere three paragraphs. Pet. 60-61.

¹ For example, the claim requires that the speech recognition system comprises a back channel receiver, which Comcast asserts is taught because “remote server 108 receives a back channel.” Pet. 54.

49. Of these three paragraphs, two simply allege that the references fall within the same technical field and that they would have been considered by a POSITA. *Id.* The third paragraph is therefore the *sole attempted explanation* of why a POSITA would have been motivated to combine all of the various challenged features of the claims based on the teachings of the different references. This is deficient.

50. Petitioner argues that a POSITA would have “recognized the benefits of combining Julia with the teachings of Nazarathy and Quigley,” yet merely identifies generalized purported benefits without linking them to the features of the challenged claims. *Id.* at 61. For instance, Petitioner alleges that the Julia network would somehow “reap the benefits” of Nazarathy or Quigley, with no accompanying factual support whatsoever for its conclusory assertions. *Id.* Petitioner then abruptly changes course, arguing in the very next sentence that a POSITA would modify Nazarathy or Quigley based on the teachings of Julia, a combination not articulated in any of its grounds, to “improve the user interface for those systems.” *Id.* These purported benefits likewise lack any factual basis, in addition to failing to support Petitioner’s proposed modification of Julia based on Nazarathy or Quigley.

51. In addition, the generalized manner in which Petitioner describes the combinations of Julia with Nazarathy or Quigley fails to explain *how* a POSITA

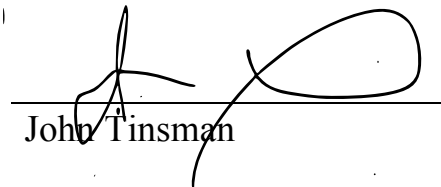
would make those combinations with a reasonable expectation of success, and Petitioner fails to articulate a credible explanation of how its combination of references solves a problem in either of its primary references.

52. As a result, nothing in the petition shows why a POSITA would have considered the proposed combinations to be obvious.

IX. CONCLUSION

I declare that all statements made herein of my knowledge are true, and that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: Sep. 27, 2018

By: 
John Tinsman